

CLAIMS:

1. An electrowetting module comprising a cavity, containing at least a first body of a first fluid and a second body of a second fluid, the two bodies being separated by an interface, and means for exerting a force on at least one of the bodies to change the position and/or shape of the interface, characterized in that at least one of the fluids comprises a compound having a zero dipole moment in the gaseous phase.
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2. A module as claimed in claim 1, wherein the at least one of the fluids comprises at least one of an alkane, a siloxane and a germoxane.
- 10 3. A module as claimed in claim 1, wherein the at least one of the fluids essentially comprises molecules having zero dipole moment.
4. A module as claimed in claim 1, wherein the compound having a zero dipole moment contains symmetric molecules.
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5. A module as claimed in claim 1, wherein the compound having a zero dipole moment is at least one of an organic compound, an organometallic compound, a germanium-based compound and a silicon-based compound, being symmetrically substituted or not.
- 20 6. A module as claimed in claim 5, wherein the symmetric, organic compound contains 1 or 2 carbon atoms and is preferably selected from the group consisting of CS_2 , CSe_2 , CCl_4 , CBr_4 and $\text{C}(\text{Cl})_2 = \text{C}(\text{Cl})_2, \text{C}(\text{Br})_2 = \text{C}(\text{Br})_2$, more preferably CCl_4 and CBr_4 .
- 25 7. A module as claimed in claim 5, wherein the symmetric organic compound is an aromatic compound, being fused or not, and being substituted or not with at least two equal, electronegative residues.

8. A module as claimed in claim 7, wherein said aromatic compound is substituted with residues, selected from a C₁-C₅ alkyl, or a halide residue, preferably methyl, chloride or bromide.

5 9. A module as claimed in claims 7 or 8, wherein said aromatic compound is selected from the group consisting of benzene, naphthalene, p-xylene, mesitylene, durene, mellitene, p-terphenyl, biphenyl, 1,4-dichlorobenzene and 1,4-dibromobenzene, 1,3,5-trichlorobenzene, 1,3,5-tribromobenzene, 1,2,4,5-tetrachlorobenzene, 1,2,4,5-tetrabromobenzene, hexachlorobenzene, hexabromobenzene, preferably p-xylene, mesitylene
10 and 1,3,5-trichlorobenzene.

10. A module as claimed in claim 5, wherein said organometallic compound is a stannic compound, preferably tetramethyl tin.

15 11. A module as claimed in any one of claims 1 to 10, configured as an optical component, the first and said second fluid body having different refractive indices, wherein the compound added to one of the fluids has a refractive index difference increasing effect.

20 12. A module as claimed in claim 8, wherein the first fluid body is electrically conducting and/or polar, and the second fluid body is electrically non-conducting, the module being provided with means for exerting an electric force to change the position and/or shape of the meniscus-shaped interface.

25 13. A module as claimed in claim 11, wherein the difference in refractive index is from 0.05 to 0.3, preferably from 0.1 to 0.2; the refractive index of said second, non-conducting body, which comprises a compound having zero dipole moment in the gaseous phase, being larger than 1.4, preferably larger than 1.45, more preferably larger than 1.50, most preferably larger than 1.55.

30 14. A module as claimed in claim 11, wherein said first and said second fluid bodies show a substantially similar density.

15. A module as claimed in claim 14, wherein the second fluid body comprises a component having zero dipole moment in the gaseous phase and a density larger than 1.0 g/cm³, preferably larger than 1.05 g/cm³, specifically larger than 1.50 g/cm³.